510(k) Pre-Market Notification: COBE® HC 700 Midi Hemoconcentrator

# APR 3 0 2001

#### 510(k) Summary

SUBMITTER:

Hospal Industrie

**Subsidiary of GAMBRO** 

B.P.126-7 Avenue Lionel-Terray F-69883 MEYZIEU Cedex

**FRANCE** 

APPLICANT:

COBE Cardiovascular, Inc. Division of Sorin Biomedica

14401 W. 65<sup>th</sup> Way

Arvada, Colorado 80004-3599 USA

**CONTACT PERSON:** 

Barbara Watson

Regulatory Affairs Specialist COBE Cardiovascular, Inc. Arvada, Colorado USA Phone: (303) 467-6018 Fax:

(303) 467-6429

DATE PREPARED:

August 1, 2000

**DEVICE TRADE NAME:** 

COBE® HC 700 Midi Hemoconcentrator

**COMMON/USUAL NAME:** 

Hemoconcentrator

**CLASSIFICATION NAME:** 

Dialyzer, High Permeability With or Without Sealed Dialysate System

PREDICATE DEVICE:

COBE® HC 1400 Maxi Hemoconcentrator

#### **DEVICE DESCRIPTION:**

The COBE® HC 700 Midi Hemoconcentrator is a sterile, non-pyrogenic device, for single use only, and is not to be resterilized by the user. The COBE® HC 700 Hemoconcentrator is intended to be used to concentrate blood that has been diluted during cardiopulmonary bypass surgery. The COBE® HC 700 Hemoconcentrator removes plasma water and dissolved solutes from blood, thereby concentrating the red cell mass and plasma proteins.

The device will be sold either individually or as part of a heart/lung pack.

The COBE® HC 700 Hemoconcentrator consists of a transparent housing with two 1/2" luer locking filtrate ports. A transparent blood header cap with a 3/16" luer locking blood port is bonded to each end of the housing. Inside the housing are multiple hollow fibers. These fibers are bonded within the housing with urethane.

#### INDICATIONS FOR USE

The COBE® HC 700 Midi Hemoconcentrator is intended to be used during and after cardiopulmonary bypass surgery to concentrate blood that has been diluted during cardiopulmonary bypass surgery. The COBE® HC 700 Hemoconcentrator removes plasma water and dissolved solutes from blood, thereby reconcentrating the red cell mass and plasma proteins.

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## STATEMENT OF TECHNICAL CHARACTERISTICS COMPARISON

The COBE® HC 700 Midi Hemoconcentrator is substantially equivalent to the COBE® HC 1400 Maxi Hemoconcentrator. Both devices are equivalent in intended use, design features, and method of operation. Both devices have a transparent housing with filtrate ports, blood header caps with inlet and outlet ports, and multiple hollow fibers bonded within the housing for the removal of excess fluid via filtration.

The following tests were performed to demonstrate substantial equivalence of the COBE® HC 700 Midi Hemoconcentrator to the COBE® HC 1400 Maxi Hemoconcentrator:

- 1. priming volume
- 2. blood side pressure drop
- 3. ultrafiltration rate
- 4. sieving coefficient
- 5. hemoconcentrator integrity
- 6. blood trauma, including measurement of plasma free hemoglobin, white cell depletion, platelet depletion, and index of hemolysis
- 7. first pass hemolysis
- 8. first ultrafiltrate plasma free hemoglobin
- 9. single pass plasma free hemoglobin production



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Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Ms. Barbara Watson Regulatory Affairs Specialist COBE® Cardiovascular, Inc. 14401 W. 65<sup>th</sup> Way ARVADA CO 80004-3599 Re: K003023

COBE® HC 700 Midi Hemoconcentrator

Dated: January 23, 2001 Received: January 31, 2001 Regulatory Class: II

21 CFR §876.5860/Procode: 78 KDI

### Dear Ms. Watson:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4639. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsma/dsmamain.html".

Sincerely your

Daniel G. Schultz, M.D.

Acting Director, Division of Reproductive, Abdominal, and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Pre-Market Notification: COBE® HC 700 Midi Hemoconcentrator

Indications For Use				
510(k) Number (If known	): <u>K0030</u>	<i>-</i> 23		
Device Name:				
COBE® HC	700 Midi Hemoconce	entrator		
Indications For Use:				
cardiopulm cardiopulm plasma wa	ionary bypass surgery	to concentrate bloom. The COBE® HC	ended to be used during and lood that has been diluted do 700 Hemoconcentrator ren lereby reconcentrating the re	uring noves
			N ANOTHER PAGE IF NEE	DED)
Conc	urrence of CDRH, Off	ice of Device Eva	luation (ODE)	
				·
Prescription Use Per 21 CFR 801.109)		<b>O</b> R	Over-The-Counter	Use
	(Division Sign-Off) Division of Reproduct and Radiological Devi		NT,	0 <b>u</b> 5